



MOBILE IN A CONTAINERS WORLD

A Strategy for Modern App Dev with a Mobile Twist

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AGENDA

- **WHY - Modern App Dev**
- **WHO - Personas & Needs**
- **WHAT - Building Blocks**
- **HOW - Technology Stack**

Digital Transformation

“Why”



From Systems of Record

Siloed Data | Behind Firewall | Waterfall Development

A person's hands are holding a tablet computer. The screen displays a complex data dashboard with various charts, tables, and a profile card. The dashboard includes a 'Summary' section with a profile picture, a 'Key Metrics' section with three cards, and a 'Detailed View' section with a table of data. The background is blurred, showing a person in a blue shirt and a checkered pattern.

To Systems of Engagement

A hand reaching up towards a central glowing network of nodes. The network is connected to various circular icons: a monitor, a globe, a headset, a smartphone, a document, a laptop, a shopping cart, and an envelope. In the background, a world map is composed of small human icons.

Digital Transformation

Increased Efficiency | Reduced Cost | Rapid Turnaround | Cloud Native

A hand holding a black smartphone. The screen of the phone displays several white icons: a play button, a heart, a location pin, and a document. Above the phone, a multitude of white digital icons float in the air, including a lightbulb, a question mark, a padlock, a clock, a house, a laptop, an envelope, a music note, a speech bubble, a magnifying glass, a gear, a Wi-Fi symbol, and a person icon. The background is a blurred blue gradient.

Mobile: a Catalyst for Digital Transformation

A hand holding a crystal ball that reflects a city skyline, symbolizing digital transformation. The background is a blurred cityscape with tall buildings under a cloudy sky.

Digital Transformation: a Catalyst for Modern App Dev

Modern App Dev Personas & Needs

“Who”



Business Sponsor

Dashboards | App Portfolio | Analytics | Project Plans



Project Manager

Project Plan | Quality | Metrics | Analytics



Security & Compliance

Identity | Encryption | Auditing | Access Control | Data Management



Front End Developer

A person is seen from behind, sitting at a desk in an office cubicle. They are using a dual-monitor setup. The left monitor displays a code editor with dark-themed syntax highlighting. The right monitor shows a web application interface. On the desk, there is a black keyboard and a mouse. In the background, a whiteboard with a hand-drawn diagram is visible. The cubicle is decorated with a bottle of 7-Eleven water, a small Mickey Mouse figurine, and a blue bag. The office has a drop ceiling with fluorescent lights.

Back End Developer

Data Storage | Integrations | Performance | Monitoring | Logging | CI/CD

A person is holding a black smartphone in their left hand, displaying a dashboard with a line graph. In the background, a laptop is open on a wooden desk, showing a similar dashboard. The scene is dimly lit, with a warm glow from the screens. A white mouse is visible on the desk to the right of the laptop.

Mobile Developer

Identity | Push Notification | Offline | UI/UX | SDKs | Debugging | CI/CD



Citizen Developer

Low/No Code | Form Designer | Process Definition | Workflow Management



System Administrator

Installations | Upgrades | Monitoring | Metrics | Configuration | Backups



Support Agent

Logging | Remote Debug | System Dump | Metrics



End Users

Feedback Loop | Manage SSO | App Portfolio & Updates | Devices

CONCLUSIONS

Mobile is part of something much bigger

B.

C.

Modern App Dev Building Blocks

“What”



Storage

Database (SQL/NoSQL) | File System | Object | Caching

Backend

Java | JavaScript (Node.js) | PHP | Ruby | Serverless | CI/CD

The background of the slide features a photograph of two hands, one from the left and one from the right, reaching towards each other. The hands are silhouetted against a bright, cloudy sky with a sunburst effect. A semi-transparent white horizontal band is positioned across the middle of the image, serving as a backdrop for the title text.

Integrations

Backend | API Mapping | Message Queues



Security

API Management | User Management | Device Security



Analytics

Installs | Startups | Active Users | Usage Patterns | A/B Testing



Monitoring

Health | Logs | Metrics | Performance & Uptime



Collateral



[Documentation](#) | [Videos](#) | [Templates](#) | [Guides](#) | [Blogs](#)

A close-up photograph of a person's hands holding a tablet computer. The tablet is held over a laptop keyboard, which is visible in the foreground. The background is blurred, showing more of the laptop and some papers. A semi-transparent white rectangular box is centered over the image, containing the text 'Mobile Client' in a dark blue, sans-serif font.

Mobile Client

Push Notifications | Data Sync | App Management | Device Security | Remote Config, Debug, File Access & Logs

CONCLUSIONS

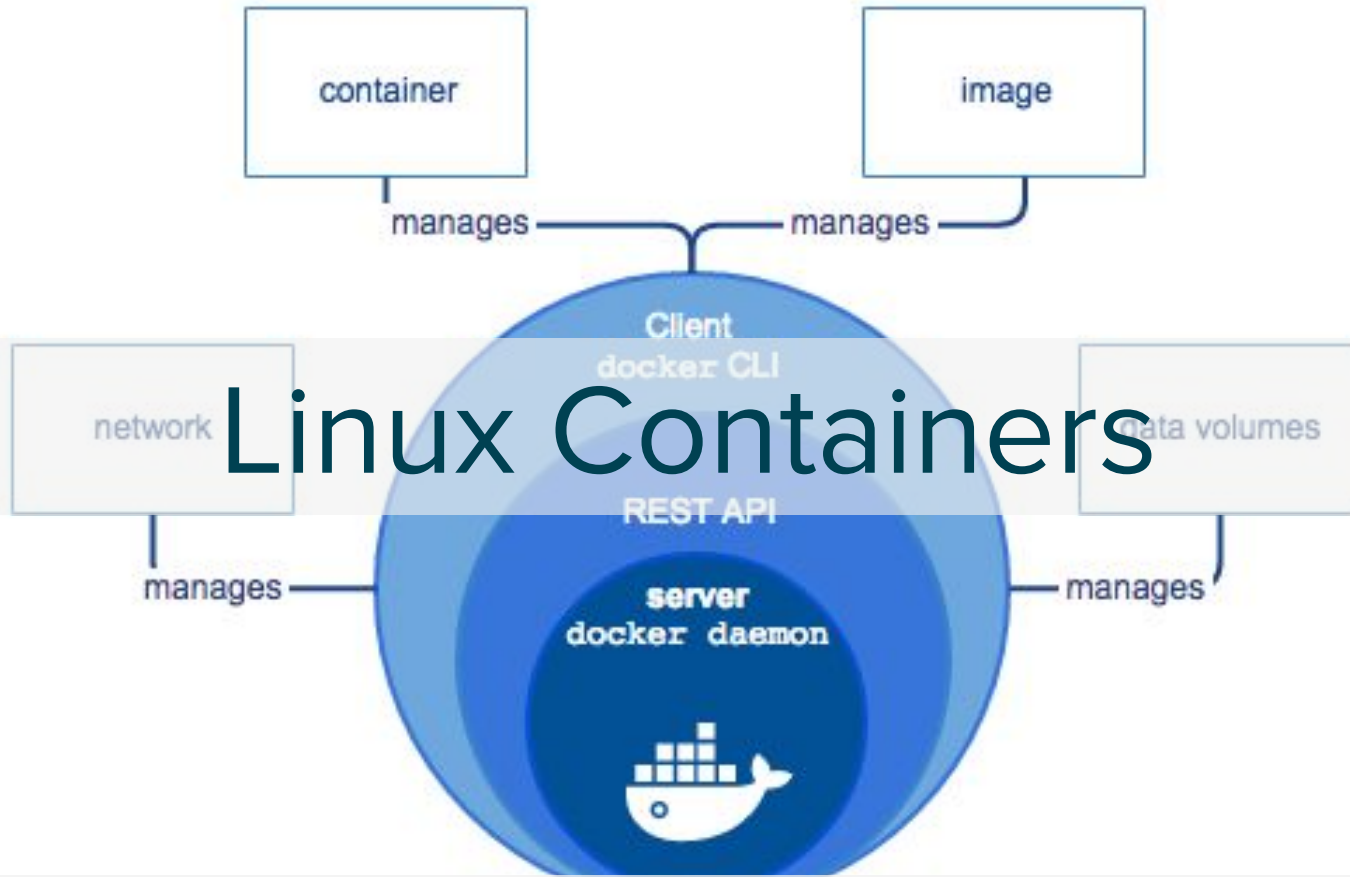
Mobile is part of something much bigger

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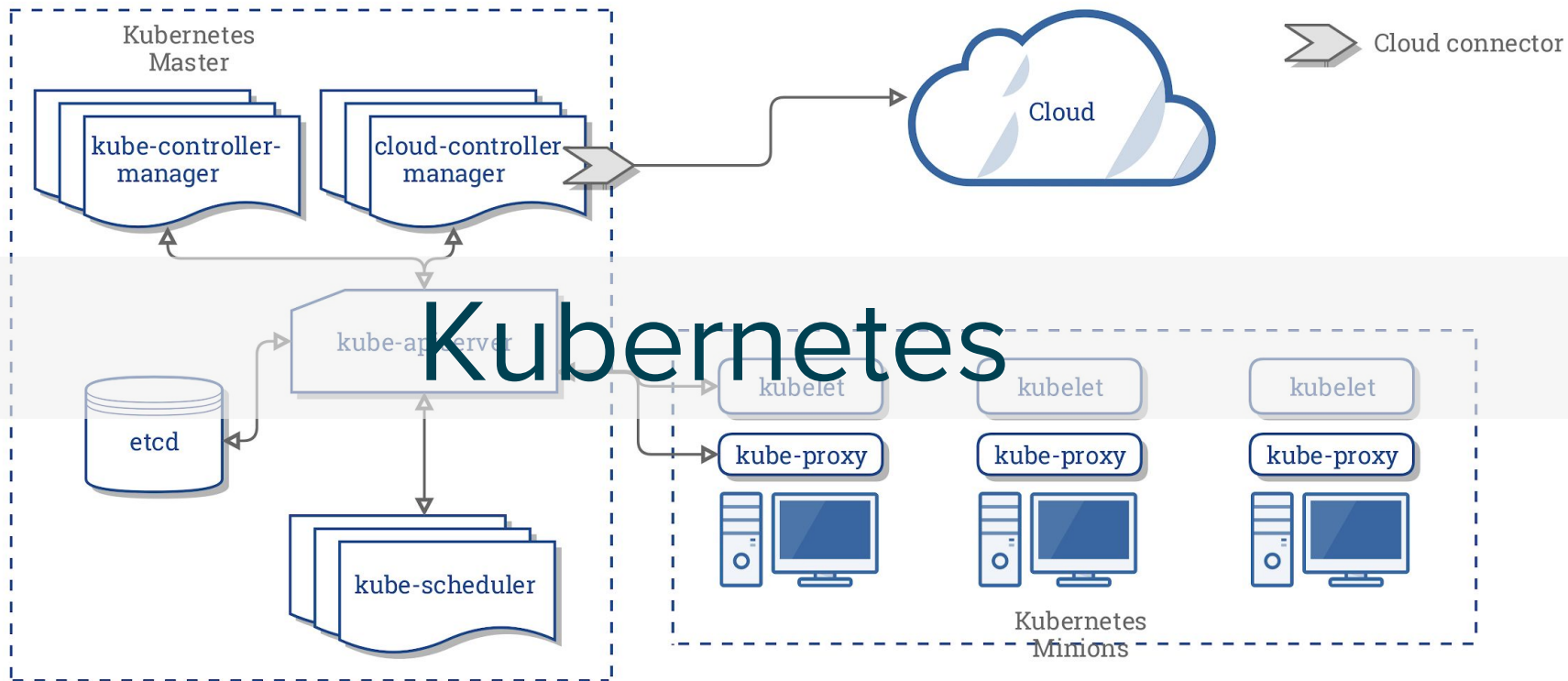
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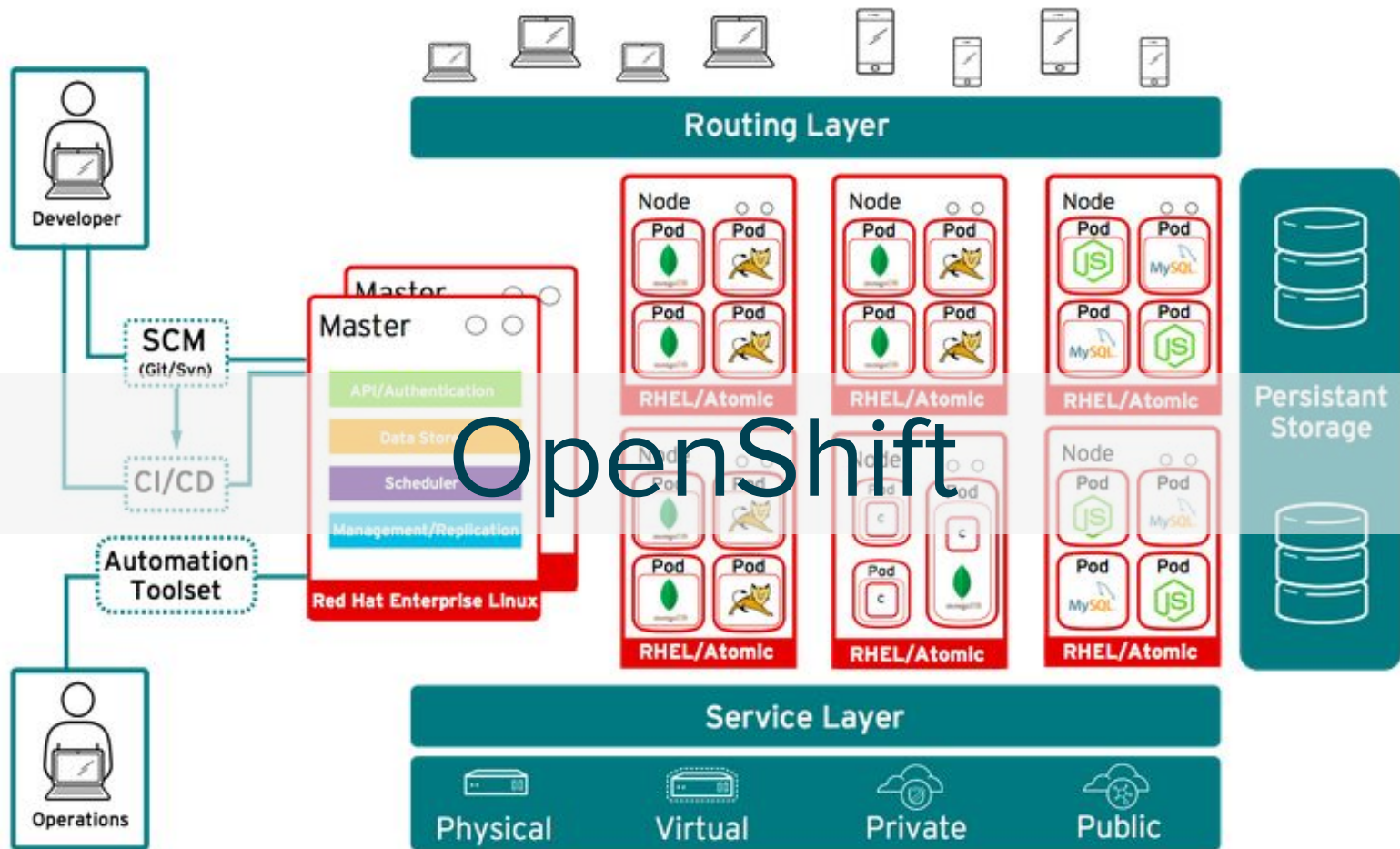
Technology Stack

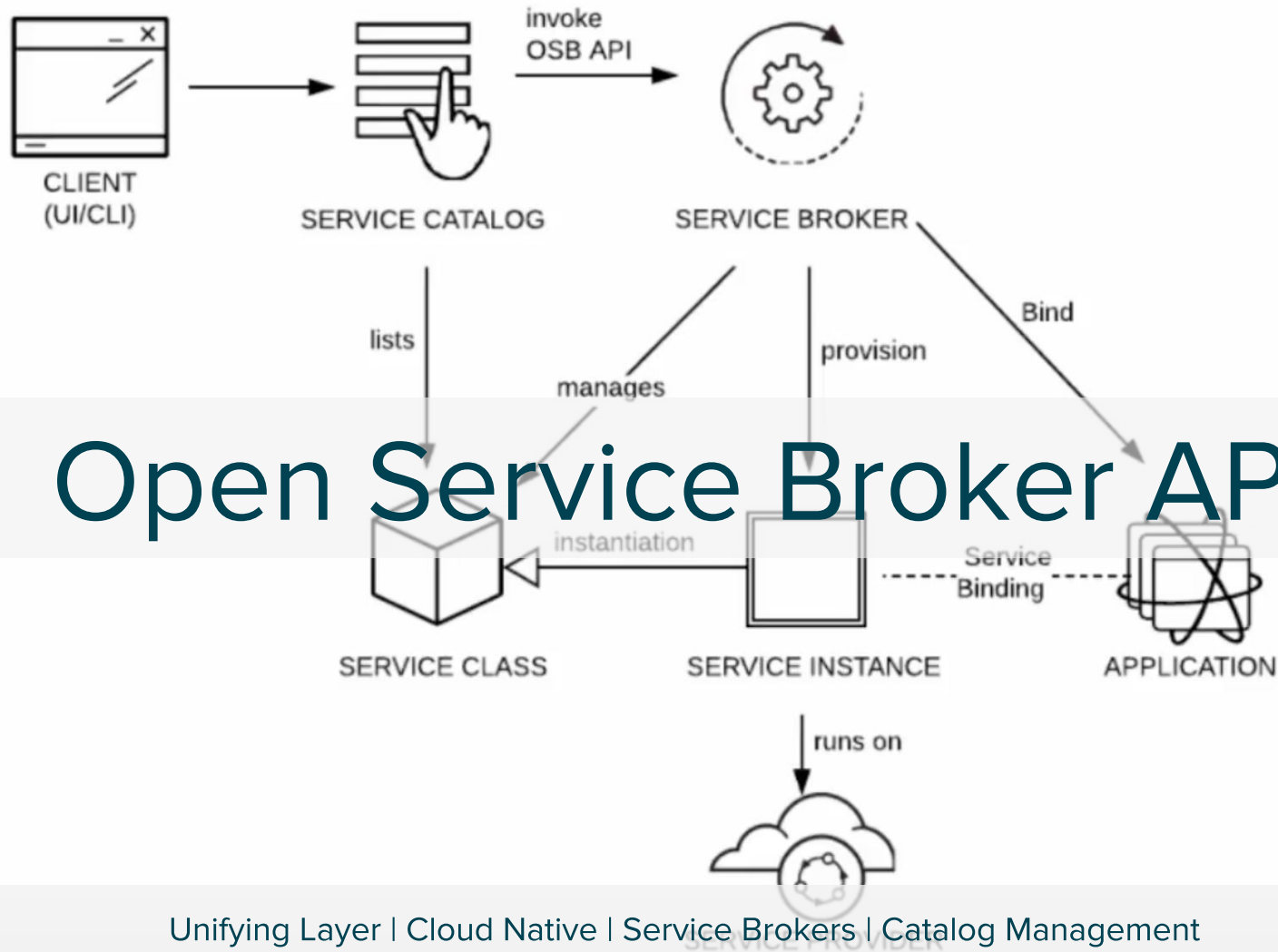
“How”



Linux Containers







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All



Apps



Services

Filter 9 Items

Mobile Services



3Scale



AeroGear UPS



Android App



Cordova App



FeedHenry Sync Server



iOS App



Keycloak



Metrics



Mobile CI/CD

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Initial developer project

Getting Started

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- [Local Development](#)
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Security & Identity Management

Authorization & Authentication | Multi Factor Identity | Single Sign On | Device Security & Trust

A conceptual diagram illustrating data synchronization. Two large, 3D cubes made of blue squares are positioned on the left and right. A stream of blue squares flows from the left cube to the right cube, and another stream flows from the right cube back to the left cube. Two large green arrows, one at the top and one at the bottom, indicate the direction of the flow. The background is a light blue, textured surface.

Data Synchronization

Offline First | 3 Way Sync | Collision Detection & Management | Differential Sync

A hand holds a black smartphone displaying a lock screen with a starry night background. The time is 7:12 on Thursday, June 8. A push notification from 'YOURCOMPANY' is visible, stating 'Tornado warning: facilities closed today' and 'Due to the recent tornado warnings in the Oklahoma City area'. Below the notification is a 'Press for more' link. At the bottom of the screen, it says 'Press home to unlock'. In the foreground, a hand holds a black mug filled with coffee. The background is a blurred image of water.

Push Notifications

iOS, Android & Web | Real time Stats | Targeted Messages | Certificate Management



API Gateway



Traffic Management | Rate Limiting | Access Control | Analytics

A white robotic arm with a camera at the end is mounted on a tracked mobile base. The robot is in a modern building with large windows. In the foreground, there is a wall made of dark, textured blocks. The text "Build Automation" is overlaid on the image.

Build Automation

iOS & Android | Native & Hybrid | Jenkins Pipelines | Containerized Builds

A close-up photograph of a person's hand, wearing a light blue striped shirt, touching a tablet screen. The tablet displays a dashboard with several data visualizations: a bar chart with blue bars and a red line graph at the top, and a 3D pie chart with blue and purple segments below it. The word 'Metrics' is overlaid in a large, dark blue font across the center of the image.

Metrics

Service Usage & Statistics | Device & SDK Versions | Error Reporting | Security Reporting



The Future



Serverless | Remote Debugging | Hot Code Push | Device Test Automation | Dynamic Config | Analytics



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